



**INSPIRE**  
Infrastructure for Spatial Information in Europe

## **Member State Report: Hungary, 2013**

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# 1 INSPIRE Reporting – Overview of requirements

There are five topics addressed in the Reporting chapter of the IR:

1. Organisation, co-ordination and quality assurance

The first part of this section is concerned with the way in which the contact point and co-ordinating structure for the infrastructure for spatial information are organised – the body responsible, its associated co-ordinating structure and some information about how this works. The second part offers the MS the opportunity to report on quality assurance processes within the infrastructure for spatial information (as required by Art 21 of the Directive).

2. Contribution to the functioning and coordination of the infrastructure

The second section asks for information about the stakeholders involved in the infrastructure for spatial information – including a description of their roles, how they co-operate, how they share data/services and how access is made to services via the INSPIRE geo-portal.

3. Usage of the infrastructure for spatial information

Having some or all of the various components of the infrastructure for spatial information in place is important, but equally important is if, or how much, the infrastructure is being used. This part of the report is intended to give MS the opportunity to comment and explain the results of the indicators on the usage of the different services, and to describe how spatial data and services are being used by public bodies and if possible (because it is recognised that this is difficult to observe) how they are being used by members of the general public. Because of the environmental emphasis of the Directive MS are particularly encouraged to find and describe examples of use within the field of environmental policy. The report should also describe examples of cross-border usage, efforts to improve cross-border consistency and examples of the use of transformation services.

4. Data sharing arrangements

Chapter 5 of the INSPIRE Directive is concerned with data sharing. It has not been possible to derive adequate indicators to monitor data sharing – the subject does not lend itself to quantitative methods in a way that would provide meaningful output. It is a major part of the Directive however and so this Chapter is dealt with, in terms of monitoring and reporting, by asking MS to describe data sharing arrangements in their 3 yearly reports. MS are required to provide an “*overview*” of data sharing arrangements i.e. not all such agreements have to be listed and described (which would be very difficult and extremely onerous) – but MS are encouraged to provide sufficient description to enable readers to understand the main type or types of agreement that are used – both for sharing of data between public bodies in the MS and between those public bodies and the institutions of the EU. An important section also required is a description of known barriers that may be inhibiting the sharing of spatial data and services, and what steps the MS are taking to overcome those barriers.

5. Cost and benefit aspects

Finally, the Directive requires MS to quantify the costs and benefits involved in the establishment and maintenance of the infrastructure for spatial information *that are directly attributable to the implementation of the Directive*. The report should attempt to estimate the costs and to provide examples of benefits as described in the IR. As with other aspects of the report MS are responsible for deciding the depth/level of reporting that they find appropriate to satisfy the IR and to provide a suitable level of information for stakeholders.

## 2 How to use this template

This template provides a structure Member States can use to collect and transmit the reporting information to the EC.

This template mainly reflects the list of elements required by the Commission Decision 2009/442/EC on monitoring and reporting. These are the mandatory elements. For every chapter the relevant article of the implementing rules on monitoring and reporting will be reported.

Also some optional features, not strictly required by the relevant legislation, are included. These features can either contain a suggestion on what elements can be grouped under a certain topic foreseen by the legislation or they can contain additional elements that enhance the readability of the document. These features are optional.

You have full rights to deliver this report in your own language, we will then translate it internally. Of course if the report will be already in English, or accompanied by its English translation, that will be welcome.

**Disclaimer: This document will be publicly available as a 'non-paper', as it does not represent an official position of the Commission, and as such cannot be invoked in the context of legal procedures.**

### **3 Executive summary**

The purpose of Directive 2007/2/EC – known as the INSPIRE (Infrastructure for Spatial Information in Europe) Directive – is to lay down general rules aimed at the establishment, management and maintenance of the Infrastructure for Spatial Information in the European Community and of its computerised, Internet-based services, and to establish this infrastructure between 2009 and 2020 in order to ensure that the enforcement of Community policies, the coordination of the activities that have an impact on the environment, and the management of, and feedback from, the political mechanisms of action are smooth, simple and efficient.

The development and functioning of the information society requires the establishment, processing and use of immeasurable amounts of data. Spatial information is a tool of the information society which plays a crucial role in the improvement of processes and modernisation of services worldwide. The objective of the National Spatial Data Infrastructure (NTI) is to systematise the tasks of this specific field. The development of the NTI is especially timely in terms of the necessity to join the INSPIRE programme, i.e., the European spatial data infrastructure action.

## 4 Abbreviations and Acronyms

EK	European Community
EOV	Hungarian Uniform National Projection system
ETRS89	European Terrestrial Reference System 1989
FÖMI	Institute of Geodesy, Cartography and Remote Sensing
HM	Ministry of Defence
HUNAGI	Hungarian Association for Geo-information
INSPIRE Directive	Directive 2007/2/EC
ISO 9001	International Organization for Standardization Quality management systems
ISO/IEC 27001	ISO - Information security management systems
KKK	Hungarian Transport Administration
KSH	Hungarian Central Statistical Office
MBFH	Hungarian Office for Mining and Geology
MFGI	Geological and Geophysical Institute of Hungary
MK	Hungarian Public Road Nonprofit Private Limited Company
MS	Member State
NÉBIH	National Food Chain Safety Office
NKTR	National Environmental Information System
NTI	National Spatial Data Infrastructure
NTIB	National Spatial Data Infrastructure Committee
OMSZ	Hungarian Meteorological Service
OVF	Central Directorate for Water and Environment
SDI	Spatial Data Infrastructure
SDIC	Spatial Data Interest Community
VÁTI	Hungarian Public Nonprofit Limited Liability Company for Regional Development and Town Planning
VKI	Water Framework Directive
VM	Ministry of Rural Development

## 5 Introduction

- Background

Pursuant to Article 9(1) of Government Decree No 241/2009 of 29 October 2009 on the establishment and operation of the National Environmental Spatial Information System ('the NKTR Decree') – which is intended to transpose the INSPIRE Directive – the Minister for the Environment is responsible for liaising with the European Commission.

In Hungary, this function is held by the Ministry of Rural Development (the 'VM').

A significant proportion of the data generated in the public sphere is data that can be related to spatial location, i.e. spatial data. In Hungary, these spatial data currently belong to more than one ministry or ministerial support institution. The harmonisation of these spatial data is incomplete and cooperation between the databases is a problem; therefore, we must establish the National Spatial Data Infrastructure, one basic element of which is Directive 2007/2/EC of the European Parliament and of the Council establishing an Infrastructure for Spatial Information in the European Community (INSPIRE).

Therefore, in order to operate the National Spatial Data Infrastructure, the Hungarian Government wishes to establish the National Commission for Spatial Data Infrastructure (the 'NTIB') in order to ensure a more efficient use and harmonisation of national spatial data and national spatial information systems.

- Method used to compile the report

In Hungary, the VM is responsible for the implementation tasks related to the INSPIRE. Within the VM, these tasks are performed by the Department of Geodesy and Spatial Informatics of the Directorate-General for Lands and Spatial Informatics. Currently, the function of the National INSPIRE Contact Point is held by the Head of the Department of Geodesy and Spatial Informatics of the VM, and his/her work is assisted by the Institute of Geodesy, Cartography and Remote Sensing (FÖMI), a support institution of the VM.

The present report was compiled on the basis of the monitoring reports of the Hungarian INSPIRE data managers. Upon approval in Hungary, the report will be uploaded to the INSPIRE portal designated by the Commission.

## 6 Co-ordination and quality assurance (Art. 12)

### 6.1 Coordination (Art. 12.1.)

#### 6.1.1 Member State contact point

Art. 12.1. (a) the name, contact information, role and responsibilities of the Member State contact point;

##### Name and contact information

Member State Contact Point	
Name of the public authority	Vidékfejlesztési Minisztérium
Contact information:	
Mailing address	1055 Budapest, Kossuth Lajos tér 11. HUNGARY
Telephone number	+36-1-795-2000
Telefax number	+36-1-795-0200
Email address	tamas.koos@vm.gov.hu
Organisation's website URL	<a href="http://www.kormany.hu/hu/vidékfejlesztési-minisztérium">http://www.kormany.hu/hu/vidékfejlesztési-minisztérium</a>
Contact person (if available)	Tamás Koós
Telephone number	+36-1-7952-189
Email address	<a href="mailto:tamas.koos@vm.gov.hu">tamas.koos@vm.gov.hu</a>
Contact person - substitute (if available)	Tamás Palya
Telephone number	+36-1-460-4091
Email address	palya.tamas@fomi.hu

##### Role and responsibilities

#### 6.1.2 The coordination structure

- (b) the name, contact information, role and responsibilities, organisation chart of the coordinating structure supporting the contact point of the Member State
- (c) a description of the relationship with third parties;
- (d) ) an overview of the working practices and procedures of the coordinating body;
- (e) comments on the monitoring and reporting process

##### Name and contact information

The work of the Hungarian INSPIRE contact point is assisted by the Institute of Geodesy, Cartography and Remote Sensing.

Coordinating structure supporting the MSCP	
Name of the coordination structure	Földmérési és Távérzékelési Intézet
Contact information:	
Mailing address	1149 Budapest, Bosnyák tér 5.
Telephone number	+36-1-222-5101
Telefax number	+36-1-222-5112
Email address	info@fomi.hu
Organisation's website URL	<a href="http://www.fomi.hu">www.fomi.hu</a>
Contact person (if available)	Tamás Palya
Telephone number	+36-1-460-4091
Email address	palya.tamas@fomi.hu
Contact person - substitute (if available)	
Telephone number	
Email address	
Date and period of mandate	

##### Role and responsibilities

In connection with Directive 2007/2/EC, the National Environmental Spatial Information Coordination

Committee – the coordination body established pursuant to Article 10 of the NKTR Decree – was dissolved on 29 May 2010. However, no new body has been established to carry out the proposal making and information provision tasks assisting the contact activities pursued by that body and specified in Article 9 of the NKTR Decree. During the past 1.5 years, the Ministry of Rural Development pursued the Member State liaising without a coordination committee. Also for this reason, the committee should be re-established under the name ‘NTIB’.

## Organisation chart

Due to the above reasons, Hungary fails to have a national coordination committee at the moment; it is expected to be reorganised after 2013.

## Relation with third parties

In terms of the INSPIRE Directive, the most important third party is the Hungarian Association for Geo-information (HUNAGI). The HUNAGI is a non-profit civil organisation established to serve the Hungarian community interested in the production, provision and use of geo-information and spatial data. The HUNAGI is member of the SDIC Community.

The primary task of the HUNAGI is to promote and introduce the use of spatial information technologies. In this framework, the tasks of the HUNAGI include the strengthening and maintenance of institutional relations between Hungarian and foreign spatial information communities, the provision of assistance to the work of government and local municipalities in the field; in addition, the HUNAGI helps the preparation of new legislation with relevance in the field, with special regard to the Hungarian implementation of the relevant EU legislation related to spatial informatics. Between 2010 and 2013, the HUNAGI organised a conference every year; among others, this facilitated the introduction of the INSPIRE Directive to the Hungarian spatial information sector.

## Overview of working practices and procedures

The main coordination tasks are carried out by the national INSPIRE contact person. The tasks of the national contact person include:

a. Towards the Special INSPIRE Committee:

- to make available the information on the results of the transposition of the Directive and the related EU legislation into the Hungarian legislation,
- to carry out the tasks of the Hungarian contact person towards the INSPIRE Committee,
- to provide information on the implementation of the INSPIRE by Hungary on a regular basis,
- to prepare regular Member State reports to the Committee.

b. Towards the Hungarian data managers:

- to collect, coordinate and make accessible the initiatives and comments received in response to the relevant pieces of legislation,
- to assess the expectations and requirements arising during the implementation of the tasks of the Member States in relation to the INSPIRE (monitoring),
- liaising with stakeholders interested in the implementation on the Hungarian side, and coordination of their activities.

### 6.1.3 Comments on the monitoring and reporting process

In Hungary, no online process is in place for the monitoring report yet. The national INSPIRE contact person receives the requested data from the Hungarian contact points for the INSPIRE spatial data themes, and makes a national summary of the data received.

## 6.2 Quality Assurance (Art. 12.2.)

### 6.2.1 Quality assurance procedures

Art. 12.2. (a) a description of quality assurance procedures, including the maintenance of the infrastructure for spatial information

No comprehensive spatial information infrastructure is in place to ensure data quality. The quality assurance processes are carried out by the data suppliers of the INSPIRE data themes in relation to their own data.

The quality of the national-level official tasks related to civilian geodesy, real estate registries, cartography, remote sensing and spatial informatics, as well as of the service, research and development activities is controlled by FÖMI acting as the national public administration body responsible for geodesy and spatial informatics.

Process quality control is carried out according to standard ISO 9001.

The basic State data, real estate registry data and other IT data assets related to the above-mentioned processes and the business, partner and personnel data of the FÖMI are managed according to the international standard ISO/IEC 27001.

### 6.2.2 Analysis of quality assurance problems

Art. 12.2. (b) an analysis of quality assurance problems related to the development of the infrastructure for spatial information, taking into account the general and specific indicators

Still, the key problem is the fact that the data appearing in the spatial information systems do not have a common quality assurance system and the corresponding indicators are also absent.

### 6.2.3 Measures taken to improve the quality assurance

Art. 12.2. (c) a description of the measures taken to improve the quality assurance of the infrastructure

The Hungarian INSPIRE contact person will propose that a subcommittee be established within the NTIB with the task of ensuring the quality of spatial data. Thereafter, the subcommittee will prepare a guideline to specify the set of quality criteria for the data of the National Spatial Data Infrastructure and these will be in line with the quality requirements of the INSPIRE Directive.

### 6.2.4 Quality certification mechanisms

Art. 12.2. (d) where a certification mechanism has been established, a description of that mechanism

Hungary does not have a general certification system for the quality of the spatial data yet.

## 7 Functioning and coordination of the infrastructure (Art.13)

### 7.1 General overview description of the SDI

- Vision / policy / strategy (where applicable, reference could be given to existing documents, as well as a short summary within the report)

Currently, Hungary does not have a nationally harmonised National Spatial Data Infrastructure. Each field manages the data within their own scope of action in accordance with the legal requirements but no rule is in force regarding their harmonisation.

Therefore, the Hungarian Government wishes to establish a standing committee to steer the operation of the National Spatial Data Infrastructure in order to ensure a more efficient use and harmonisation of the national spatial data and spatial information systems and in order to establish the National Spatial Data Infrastructure itself.

The National Spatial Data Infrastructure is the entirety of the spatial data, spatial information systems and registries managed by the State. The establishment of the National Spatial Data Infrastructure will allow an efficient and coordinated use of the spatial data and spatial information systems by the Government, which is indispensable for ensuring proper decision-preparation, for managing emergency situations, for establishing a better environmental status, for improving the quality of State services and for establishing a better service-providing State. Establishment of the Committee is necessary for the steering of the National Spatial Data Infrastructure on the governmental level.

Act XLVI of 2012 on geodetic and cartographic activities regulates the operation of the National Spatial Data Infrastructure in Article 36 thereof, and its implementing decree is under preparation.

### 7.2 INSPIRE Stakeholders

Art. 13 (a) an overview of the various stakeholders contributing to the implementation of the infrastructure for spatial information according to the following typology: users, data producers, service providers, coordinating bodies.

After the government change in 2010, the Hungarian Government underwent structural changes. Accordingly, new INSPIRE administrators had to be identified.

### 7.3 Role of the various stakeholders

Art. 13 (b) a description of the role of the various stakeholders in the development and maintenance of the infrastructure for spatial information, including their role in the coordination of tasks, in the provision of data and metadata, and in the management, development and hosting of services

By the end of 2012, the designation of the Hungarian institutions of the INSPIRE data theme was complete. These are listed in the Annex. See Point 12.1.

### 7.4 Measures taken to facilitate sharing

Art. 13 (c) a general description of the main measures taken to facilitate the sharing of spatial data sets and services between public authorities and a description of how sharing has improved as a result

Act XLVI of 2012 on geodetic and cartographic activities regulates the supply of basic State data in Articles 5 and 6 thereof. According to Article 5(1): "The data may also be supplied electronically (through a network) provided that the technical conditions thereof are ensured."

## 7.5 Stakeholder cooperation

Art.13 (d) a description of how stakeholders cooperate

This could for example include the description of:

- Written framework for cooperation
- Working groups (list of active working groups)
- Newsletters, other publications (references)
- Description of the National geoportal (including URL), and where relevant regional or thematic portals

In Hungary, INSPIRE data services are available from the websites of almost all the field but these services are not coordinated as yet.

Institution	Data Port
Institute of Geodesy, Cartography and Remote Sensing (FŐMI)	<a href="http://geoshop.hu">http://geoshop.hu</a> <a href="http://www.gnssnet.hu">http://www.gnssnet.hu</a> <a href="http://takarnet.hu">http://takarnet.hu</a>
“Zrínyi” Cartography and Communication Services Non-profit Public Benefit Company, Ministry of Defence Cartography Non-profit Public Benefit Company, Ministry of Defence	<a href="http://www.topomap.hu">http://www.topomap.hu</a>
Co-ordination Centre for Transport Development (KKK)	<a href="http://www.kenyi.hu">http://www.kenyi.hu</a> <a href="http://www.hidadat.hu">http://www.hidadat.hu</a> <a href="http://www.utadat.hu">http://www.utadat.hu</a>
Hungarian Central Statistical Office (KSH)	<a href="http://www.ksh.hu">http://www.ksh.hu</a>
“Lechner Lajos” Knowledge Centre Regional Building, Heritage Protection and Informatics Non-profit Ltd. (VÁTI)	<a href="http://www.lltk.hu/tudastar/teir">http://www.lltk.hu/tudastar/teir</a> <a href="http://www.teir.hu">www.teir.hu</a>
Hungarian Office for Mining and Geology (MBFH)	<a href="http://www.mbfh.hu">http://www.mbfh.hu</a>
Geological and Geophysical Institute of Hungary (MBFH)	<a href="http://loczy.mfqi.hu/ewater/">http://loczy.mfqi.hu/ewater/</a> <a href="http://loczy.mfqi.hu/mfdt500/">http://loczy.mfqi.hu/mfdt500/</a> <a href="http://loczy.mfqi.hu/mfdt500/">http://loczy.mfqi.hu/mfdt500/</a>
Hungarian Public Roads Non-profit cPlc. (MK)	<a href="http://www.kozut.hu">http://www.kozut.hu</a>
National Food Chain Safety Office (NÉBIH)	<a href="http://erdoterkep.nebih.gov.hu/">http://erdoterkep.nebih.gov.hu/</a>
Hungarian Meteorological Service (OMSZ)	<a href="http://www.met.hu/en/idojaras/">http://www.met.hu/en/idojaras/</a>
National Directorate-General for Water (OVF)	<a href="http://www.vizugy.hu">http://www.vizugy.hu</a> <a href="http://www.euvki.hu">http://www.euvki.hu</a>
Department-General of Nature Conservation, VM	<a href="http://84.206.44.58:8080/deegree-webservices-3.2-pre12/postgis_inspire/wms">http://84.206.44.58:8080/deegree-webservices-3.2-pre12/postgis_inspire/wms</a>

## 7.6 Access to services through the INSPIRE Geoportal

Art.13 (e) a description of the access to the services through the Inspire geo-portal, as referred to in Article 15(2) of Directive 2007/2/EC

After the establishment of the NTIB, our objective is to establish the Hungarian INSPIRE geoportal, which will be registered on the INSPIRE geoportal of the Commission.

## 8 Usage of the infrastructure for spatial information (Art.14)

### 8.1 Use of spatial data services in the SDI

Art.14 (a) the use of the spatial data services of the infrastructure for spatial information, taking into account the general and specific indicators

This could include an explanation of how this information was collected, and how it should be interpreted/understood.

As previously mentioned, Hungary does not have a common NTI yet, and thus there are no services supplying data as part of the NTI.

In addition, of course each governmental field supplies data separately.

### 8.2 Use of the spatial datasets

Art.14 (b) the use of spatial data sets corresponding to the themes listed in Annexes I, II and III to Directive 2007/2/EC by public authorities, with particular attention to good examples in the field of environmental policy

Act XLVI of 2012 on geodetic and cartographic activities allows unlimited free data uses among public authorities in a restricted scope only. Data uses free of charge are only possible on the basis of an authorisation granted by law.

In case of emergencies (for example: red mud catastrophe in Kolontár in 2010, flood on the Danube in 2013), the FÖMI supplies data to the National Emergency Management Directorate-General and other stakeholders free of charge.

### 8.3 Use of the SDI by the general public

Art.14 (c) if available, evidence showing the use of the infrastructure for spatial information by the general public

In Hungary, land data can be used upon paying an administrative service fee or a data use fee.

### 8.4 Cross-border usage

Art.14 (d) examples of cross-border use and efforts made to improve cross-border consistency of spatial data sets corresponding to the themes listed in Annexes I, II and III to Directive 2007/2/EC

The FÖMI participated in several international EU-supported projects (GIS4EU, ESDIN, HUMBOLDT, EURADIN) assisting the implementation of the INSPIRE Directive, and we also wish to participate in the 2013 European Location Framework (ELF) Project coordinated by EuroGeographics. There is also a Croatian-Hungarian-Slovenian cross-border cooperation programme for joint EU projects with the support of EuroGeographics.

Furthermore, we contribute to the following EuroGeographics products:

- EuroGlobalMap (EGM) Project: preparation of a 1:1,000,000 scale harmonised digital topographic database for Europe.
- EuroBoundaryMap (EBM) Project: preparation of a 1:100,000 scale harmonised digital administrative boundary database for Europe.
- EuroDEM Project: preparation of a 1:100,000 scale harmonised digital relief model for Europe.
- EuroRegionalMap (ERM): preparation of a 1:250,000 scale harmonised digital topographic database for Europe. The Hungarian Military Cartography Service participates in the generation of this database.

## 8.5 Use of transformation services

Art.14 (e) how transformation services are used to achieve data interoperability

The FÖMI website offers an online coordinate transformation service which performs the conversion between the Uniform Projection System (EOV) and the ETRS89 System. This service is freely available for anyone.

<http://www.fomi.hu/portal/index.php/termek/termek/termek/transzformacios-eljarasok>

No other INSPIRE-related online transformation processes have been developed yet.

## 9 Data sharing arrangements (Art.15)

### 9.1 Data sharing arrangements between public authorities

Art.15 (a) an overview of data sharing arrangements that have been, or are being, created between public authorities

Act XLVI of 2012 on geodetic and cartographic activities allows free data sharing between the civilian and military cartography authorities. Article 6(1) of that Act specifies that "The real estate authority and the entity responsible for the support of defence-related cartography may share data free of charge, costs or fees from the databases of basic State data in order to discharge their basic activities not qualifying as business activities."

In other cases, a fee is payable for the data.

Free data supply is only allowed for the purposes of education or research, in specific cases and for a specific volume of data; Article 6(6) of that Act specifies that "The Minister for Rural Development and the Minister of Defence may grant an exemption from paying an administrative service fee for geodetic and cartographic data belonging to their scope of action for the purposes of specialised school-based education and scientific research".

Data sharing arrangements between public authorities and Community institutions and bodies

Art.15 (b) an overview of data sharing arrangements that have been, or are being, created between public authorities and Community institutions and bodies, including examples of data sharing arrangements for a particular spatial data set

The FÖMI and the Forestry Directorate of the NÉBIH have had a data exchange agreement in place in relation to the orthoimagery and forestry area database for a number of years now.

### 9.2 Barriers to the sharing and the actions taken to overcome them

Art.15 (c) a list of barriers to the sharing of spatial data sets and services between public authorities and between public authorities and the Community institutions and bodies, as well as a description of the actions which are taken to overcome those barriers

With the exception of certain data themes, the Hungarian data policy does not allow free data uses at the moment. This prevents cooperation between the different sectors of the State several times because the funds necessary to pay the data supply service fee are often missing.

Another obstacle is that the land administration sector does not receive funds from the central budget, which forces this sector to cover the costs of operating, maintaining and improving the land administration system from data sales revenues.

## **10 Cost / Benefit aspects (Art.16)**

### **10.1 Costs resulting from implementing INSPIRE Directive**

Art.16 (a) an estimate of the costs resulting from the implementation of Directive 2007/2/EC

Since Hungary does not have a comprehensive NTI yet, it is too early for us to be able to perform cost-benefit analyses. It is especially difficult if we tried to determine the costs of the INSPIRE only.

### **10.2 Benefits observed**

Art.16 (b) examples of the benefits observed, including examples of the positive effects on policy preparation, implementation, evaluation, examples of improved services to the citizen as well as examples of cross-border cooperation.

The most significant benefit we expect is that spatial data will be more readily available for both the public and the private sector. The INSPIRE Directive enables more efficient uses of these data, cooperation between individual databases, and data exchanges and harmonisation, which in summary represent one basic pillar of proper governance, of the service-providing State and of sustainable development in all countries.

## 11 Conclusions

The INSPIRE Directive plays an important role in the establishment of the National Spatial Data Infrastructure of Hungary. To that end, the Hungarian Government enacted Act XLVI of 2012 on geodetic and cartographic activities, Article 36 of which governs the operation of the National Spatial Data Infrastructure. The creation of a supporting Committee is necessary for the establishment of the National Spatial Data Infrastructure, for the monitoring of its operation and for the related reporting tasks.

In addition to the interests of the National Spatial Data Infrastructure, the Committee comprising the representatives of the ministries and entities responsible for the spatial data sets will also support the VM as the entity responsible for liaising with the European INSIPRE Committee, and will also support all ministries obliged to supply their spatial data sets in the framework of data sharing through a network according to a uniform scheme and standard in the joint performance of their tasks.

## 12 Annexes

### 12.1 List of organisations – names and contact details

#### Contacts and Responsible Persons for the INSPIRE Data Themes

Data themes (The numbering of data themes is based on Directive 2007/2/EC (INSPIRE))	Name of the institution managing spatial data	Name, position and contact details of contact person (Mail address, telephone, mobile, e-mail)	Name and contact details of the head of institution (Mail address, telephone, mobile, e-mail)	Designation of the spatial data set managed by spatial data manager (to be completed when more than one management entity is assigned to a single data theme)
1. Coordinate reference systems	FÖMI	<b>Tamás Palya</b> +36 1 460 4091 <a href="mailto:palya.tamas@fomi.hu">palya.tamas@fomi.hu</a>	<b>Bence Toronyi</b> Director-General +36 1 460 4003 Fax:+36 1 222 5112 <a href="mailto:toronyi.bence@fomi.hu">toronyi.bence@fomi.hu</a>	Transformation parameters to the ETRS'89 system
2. Geographical grid systems	FÖMI	<b>Tamás Palya</b> +36 1 460 4091 <a href="mailto:palya.tamas@fomi.hu">palya.tamas@fomi.hu</a>	<b>Bence Toronyi</b> Director-General +36 1 460 4003 Fax: +36 1 222 5112 <a href="mailto:toronyi.bence@fomi.hu">toronyi.bence@fomi.hu</a>	
3. Geographical names	FÖMI	<b>Tamás Palya</b> +36 1 460 4091 <a href="mailto:palya.tamas@fomi.hu">palya.tamas@fomi.hu</a>	<b>Bence Toronyi</b> Director-General +36 1 460 4003 Fax: +36 1 222 5112 <a href="mailto:toronyi.bence@fomi.hu">toronyi.bence@fomi.hu</a>	Geographical Names Database
4. Administrative units	FÖMI	<b>Tamás Palya</b> +36 1 460 4091 <a href="mailto:palya.tamas@fomi.hu">palya.tamas@fomi.hu</a>	<b>Bence Toronyi</b> Director-General +36 1 460 4003 Fax: +36 1 222 5112 <a href="mailto:toronyi.bence@fomi.hu">toronyi.bence@fomi.hu</a>	Administrative Borders of Hungary (MKH) Database
	KSH	<b>Mrs Andrásné Nagy Ferenc</b> +36 1 345 6366 <a href="mailto:ferencne.nagy@ksh.hu">ferencne.nagy@ksh.hu</a> (editor – Administrative Location Names in Hungary, 1 January 2012)	<b>Mrs Jánosné Waffenschmidt</b> Department-General of Census Head of Department-General +36 1 345 6564 <a href="mailto:Janosne.Waffenschmidt@ksh.hu">Janosne.Waffenschmidt@ksh.hu</a>	

Data themes (The numbering of data themes is based on Directive 2007/2/EC (INSPIRE))	Name of the institution managing spatial data	Name, position and contact details of contact person (Mail address, telephone, mobile, e-mail)	Name and contact details of the head of institution (Mail address, telephone, mobile, e-mail)	Designation of the spatial data set managed by spatial data manager (to be completed when more than one management entity is assigned to a single data theme)
5. Addresses	Central Office of Public Administration and Electronic Public Services (KEK KH)		<p><b>Iván Vetési</b> President +36 1 456 6510 Fax: +36 1 456 6509</p> <p><b>Dávid Arató</b> Vice-President for Information Technology +36 1 456 6501 Fax: +36 1 456 6506 <a href="mailto:informatikai.eh@ahiv.hu">informatikai.eh@ahiv.hu</a></p>	
6. Land parcels	National Cadastral Programme Non-profit Ltd. (NKP Nkft.)	<p><b>Dr Attila Váczy</b> +36 1 340 0304 +36 30 984 4210 <a href="mailto:vaczynkp-kft.hu">vaczynkp-kft.hu</a></p>	<p><b>József Cseri</b> Director +36 1 340 0304 Fax: +36 1 329 7616 <a href="mailto:cserinkp-kht.hu">cserinkp-kht.hu</a></p>	
	FÖMI	<p><b>Tamás Palya</b> +36 1 460 4091 <a href="mailto:palya.tamas@fomi.hu">palya.tamas@fomi.hu</a></p>	<p><b>Bence Toronyi</b> Director-General +36 1 460 4003 Fax: +36 1 222 5112 <a href="mailto:toronyi.bence@fomi.hu">toronyi.bence@fomi.hu</a></p>	Uniform Real Estate Register Database
7. Transport networks	KKK	<p><b>Veronika Forrainé Hernádi</b> Head of Department +36 1 336 8253 <a href="mailto:hernadi.veronika@kkk.gov.hu">hernadi.veronika@kkk.gov.hu</a></p> <p><b>Gergely Havas</b> Spatial Information Expert +36 1 336 8155 <a href="mailto:havas.gergely@kkk.gov.hu">havas.gergely@kkk.gov.hu</a></p>	<p><b>Tibor Feller</b> Head of Department-General Department-General for Technical Assistance Tel.: (06-1) 3368-182 Fax: (06-1) 3361-738 <a href="mailto:feller.tibor@kkk.gov.hu">feller.tibor@kkk.gov.hu</a></p> <p><b>Zoltán Szabó</b> Director-General +36 1 336 8101 <a href="mailto:szabo.zoltan@kkk.gov.hu">szabo.zoltan@kkk.gov.hu</a></p>	Uniform Bridge Register System Bicycle Road Register System National Public Road Database

Data themes (The numbering of data themes is based on Directive 2007/2/EC (INSPIRE))	Name of the institution managing spatial data	Name, position and contact details of contact person (Mail address, telephone, mobile, e-mail)	Name and contact details of the head of institution (Mail address, telephone, mobile, e-mail)	Designation of the spatial data set managed by spatial data manager (to be completed when more than one management entity is assigned to a single data theme)
	National Public Roads Non-profit cPlc. (Magyar Közút NZrt.)	<p><b>István Szarka</b> Head of Department +36 1 8199169 <a href="mailto:szarka.istvan@kozut.hu">szarka.istvan@kozut.hu</a></p> <p><b>Dóra Dióssi Melinda</b> Senior Database Fellow <a href="mailto:diossi.melinda@kozut.hu">diossi.melinda@kozut.hu</a></p> <p><b>Péter Berkes</b> Senior Database Fellow +36 1 8199 027 Fax: +36 1 8199 540 <a href="mailto:berkes.peter@kozut.hu">berkes.peter@kozut.hu</a> <a href="http://www.kozut.hu">www.kozut.hu</a></p>	<p><b>Attila Mázi</b> CEO +36 1 8199 002 <a href="mailto:mazsi.attila@kozut.hu">mazsi.attila@kozut.hu</a></p>	National Public Road Database
	State Motorway Management Company (ÁAK)	<p><b>Károly Boromissza</b> Senior Database Engineer <a href="mailto:boromissza.karoly@autopalya.hu">boromissza.karoly@autopalya.hu</a></p> <p><b>Tamás Tomascsek</b> Senior Traffic Regulation Engineer <a href="mailto:tomascsek.tamas@autopalya.hu">tomascsek.tamas@autopalya.hu</a></p>		Digital Register (expressway network)
	MÁV PÜ	<p><b>László Farkas</b> Railway Track Expert +36 1 511 3823 +36 30 956 4551 Fax: +36 1 511 7141 <a href="mailto:farkasl@mav.hu">farkasl@mav.hu</a></p> <p><b>Zsolt Bálint</b> Railway Track Expert +36 30 597 5975 <a href="mailto:balintzsolt@mav.hu">balintzsolt@mav.hu</a></p>		National railway network Railway bridges
	Győr-Sopron.Ebenfurt Railways (GYSEV)	<p><b>Balázs Orosz</b> Head of Department +36 20 915 0135 <a href="mailto:orosz.balazs@gysev.hu">orosz.balazs@gysev.hu</a></p>		National railway network

Data themes (The numbering of data themes is based on Directive 2007/2/EC (INSPIRE))	Name of the institution managing spatial data	Name, position and contact details of contact person (Mail address, telephone, mobile, e-mail)	Name and contact details of the head of institution (Mail address, telephone, mobile, e-mail)	Designation of the spatial data set managed by spatial data manager (to be completed when more than one management entity is assigned to a single data theme)
8. Hydrography	National Environmental Institute (NeKI)	<b>Mária Ritvayné Szomolányi</b> Water Basin Management Rapporteur +36 1 7952382 <a href="mailto:maria.szomolanyi.ritvayne@vm.gov.hu">maria.szomolanyi.ritvayne@vm.gov.hu</a>	<b>Zoltán Hargitay</b> Appointed Director-General +36-1 2254400 <a href="mailto:zoltan.hargitay@neki.gov.hu">zoltan.hargitay@neki.gov.hu</a>	Watercourses (>500 km <sup>2</sup> ) Standing waters (>10 km <sup>2</sup> ) Watercourse water bodies Standing water bodies Water basin areas (>500 km <sup>2</sup> )
9. Nature conservation areas	Department-General of Nature Conservation, VM	<b>Dr András Attila Takács</b> Senior Public Administration Consultant +36 30 678 8757 <a href="mailto:attila.andras.takacs@vm.gov.hu">attila.andras.takacs@vm.gov.hu</a>	<b>Dr András Attila Takács</b> Senior Public Administration Consultant +36 30 678 8757 <a href="mailto:attila.andras.takacs@vm.gov.hu">attila.andras.takacs@vm.gov.hu</a>	Nature Conservation Information System Register of Protected Natural Areas Register of the European nature conservation areas of Community importance
	Department-General of International, Hungarian-Hungarian and Public Relations, and World Heritage of the National Cultural Heritage Protection Agency (KÖH)	<b>Dr Gábor Soós</b> Head of Department-General <a href="mailto:gabor.soos@koh.hu">gabor.soos@koh.hu</a> +36 1 225 4876	<b>Dr Gábor Soós</b> Head of Department-General <a href="mailto:gabor.soos@koh.hu">gabor.soos@koh.hu</a> <a href="mailto:koh@koh.hu">koh@koh.hu</a> +36 1 225 4876	World heritage locations
	Department-General of National Parks and Landscape Conservation, VM	<b>Csaba Egri</b> Public Administration Consultant	<b>Ákos Gábor Ugron</b> Head of Department-General +36 (1) 795 2431 <a href="mailto:akos.gabor.ugron@vm.gov.hu">akos.gabor.ugron@vm.gov.hu</a>	Registry of caves and geological values

## Contacts and Responsible Persons for the INSPIRE Data Themes

### Annex II:

Data themes (The numbering of data themes is based on Directive 2007/2/EC (INSPIRE))	Name of the institution managing spatial data	Name, position and contact details of contact person (Mail address, telephone, mobile, e-mail)	Name and contact details of the head of institution (Mail address, telephone, mobile, e-mail)	Designation of the spatial data set managed by spatial data manager (to be completed when more than one management entity is assigned to a single data theme)
1. Elevation	FÖMI	<b>Tamás Palya</b> +36 1 460 4091 <a href="mailto:palya.tamas@fomi.hu">palya.tamas@fomi.hu</a>	<b>Bence Toronyi</b> Director-General +36 1 460 4003 Fax: +36 1 222 5112 <a href="mailto:toronyi.bence@fomi.hu">toronyi.bence@fomi.hu</a>	HUNDEM-5 (high-resolution digital elevation model of Hungary)
2. Land cover	Forestry Directorate, NÉBIH Department of Record-keeping and Cartography	<b>Zsolt Magyar</b> Spatial Information Expert +36 1 374 3235 <a href="mailto:magyarzs@nebih.gov.hu">magyarzs@nebih.gov.hu</a>	<b>Károly Wisnovszky</b> Director +36 1 374 3201 <a href="mailto:wisnovszky.k@nebih.gov.hu">wisnovszky.k@nebih.gov.hu</a>	Quantitative and qualitative forest data
	National Environmental Institute (NeKI)	<b>Mária Ritvayné Szomolányi</b> Water Basin Management Rapporteur +36 1 7952382 <a href="mailto:maria.szomolanyi.ritvayne@vm.gov.hu">maria.szomolanyi.ritvayne@vm.gov.hu</a>	<b>Zoltán Hargitay</b> Director-General in charge +36-1 2254400 <a href="mailto:zoltan.hargitay@neki.gov.hu">zoltan.hargitay@neki.gov.hu</a>	Standing water bodies (also in Annex 1!)
	FÖMI	<b>Tamás Palya</b> +36 1 460 4091 <a href="mailto:palya.tamas@fomi.hu">palya.tamas@fomi.hu</a>	<b>Bence Toronyi</b> Director-General +36 1 460 4003 Fax: +36 1 222 5112 <a href="mailto:toronyi.bence@fomi.hu">toronyi.bence@fomi.hu</a>	CORINE Land Cover Database
3. Orthoimagery	MVH Department-General of Information Technology	<b>István Jenei</b> Head of Department-General +36 1 219 4540 <a href="mailto:jenei.istvan@mvh.gov.hu">jenei.istvan@mvh.gov.hu</a> <b>Barnabás Varga</b> Deputy Head of Department-General <a href="mailto:varga.barnabas@mvh.gov.hu">varga.barnabas@mvh.gov.hu</a>	<b>Péter Palkovics</b> President <a href="mailto:palkovics.peter@mvh.gov.hu">palkovics.peter@mvh.gov.hu</a>	
	FÖMI	<b>Tamás Palya</b> +36 1 460 4091 <a href="mailto:palya.tamas@fomi.hu">palya.tamas@fomi.hu</a>	<b>Bence Toronyi</b> Director-General +36 1 460 4003 Fax: +36 1 222 5112 <a href="mailto:toronyi.bence@fomi.hu">toronyi.bence@fomi.hu</a>	Digital Orthoimagery Database of Hungary

<b>Data themes</b> (The numbering of data themes is based on Directive 2007/2/EC (INSPIRE))	<b>Name of the institution managing spatial data</b>	<b>Name, position and contact details of contact person</b> (Mail address, telephone, mobile, e-mail)	<b>Name and contact details of the head of institution</b> (Mail address, telephone, mobile, e-mail)	<b>Designation of the spatial data set managed by spatial data manager</b> (to be completed when more than one management entity is assigned to a single data theme)
<b>4. Geology</b>	MFGI	<b>László Vértesy</b> +36 1 363 7438 Head of Department Contact Person <a href="mailto:vertesy.laszlo@mfgi.hu">vertesy.laszlo@mfgi.hu</a>	<b>Dr Tamás Fancsik</b> Director +36 1 252 4680 +36 1 363 7840 <a href="mailto:fancsik@elgi.hu">fancsik@elgi.hu</a>	Geological and hydrogeological data and maps
	MFGI	<b>László Vértesy</b> +36 1 363 7438 Head of Department <a href="mailto:vertesy.laszlo@mfgi.hu">vertesy.laszlo@mfgi.hu</a>	<b>Dr Tamás Fancsik</b> Director +36 1 252 4680 +36 1 363 7840 <a href="mailto:fancsik@elgi.hu">fancsik@elgi.hu</a>	Geophysical and gravity force field data
	National Environmental Institute (NeKI)	<b>Mária Ritvayné Szomolányi</b> Water Basin Management Rapporteur +36 1 7952382 <a href="mailto:maria.szomolanyi.ritvayne@vm.gov.hu">maria.szomolanyi.ritvayne@vm.gov.hu</a>	<b>Zoltán Hargitay</b> Director-General in charge +36-1 2254400 <a href="mailto:zoltan.hargitay@neki.gov.hu">zoltan.hargitay@neki.gov.hu</a>	Subsurface water bodies (aquifers)

### Contacts and Responsible Persons for the INSPIRE Data Themes

#### Annex III:

Data themes (The numbering of data themes is based on Directive 2007/2/EC (INSPIRE))	Name of the institution managing spatial data	Name, position and contact details of the contact person (Mail address, telephone, mobile, e-mail)	Name and contact details of the head of institution (Mail address, telephone, mobile, e-mail)	Designation of the spatial data set managed by spatial data manager (to be completed when more than one management entity is assigned to a single data theme)
1. Statistical spatial data units	KSH	<b>Zsófia Fábián</b> +36 1 3456395 <a href="mailto:zsafia.fabian@ksh.hu">zsafia.fabian@ksh.hu</a>	<b>Gábor Valkó</b> Head of Department-General Department-General of Rural Development, Agricultural and Environmental Statistics +36 1 3456554 <a href="mailto:gabor.valko@ksh.hu">gabor.valko@ksh.hu</a>  <b>Pál Bóday</b> Head of Department <a href="mailto:pal.boday@ksh.hu">pal.boday@ksh.hu</a>	
2. Buildings	National Cadastral Programme Non-profit Ltd. (NKP NKft.)	<b>Dr Attila Váczy</b> +36 1 340 0304 +36 30 9844210 <a href="mailto:vaczyn@nkp-kft.hu">vaczyn@nkp-kft.hu</a>	<b>József Cseri</b> Director +36 1 340 0304 +36 20 9792926 Fax: +36 1 3297616 <a href="mailto:cseri@nkp-kht.hu">cseri@nkp-kht.hu</a>	
	FÖMI	<b>Tamás Palya</b> +36 1 4604091 <a href="mailto:palya.tamas@fomi.hu">palya.tamas@fomi.hu</a>	<b>Bence Toronyi</b> Director-General +36 1 460 4003 Fax: +36 1 2225112 <a href="mailto:toronyi.bence@fomi.hu">toronyi.bence@fomi.hu</a>	Uniform Real Estate Register Database
3. Soil	Forestry Directorate, NÉBIH	<b>Zsolt Magyar</b> Spatial Information Expert +36 1 374 3235 <a href="mailto:magyarzs@nebih.gov.hu">magyarzs@nebih.gov.hu</a>	<b>Károly Wisnovszky</b> Director +36 1 374 3201 <a href="mailto:wisnovszkyk@nebih.gov.hu">wisnovszkyk@nebih.gov.hu</a>	Data related to the soil quality of forests
4. Territory and land use zones	Forestry Directorate, NÉBIH	<b>Zsolt Magyar</b> +36 1 374 3235 Spatial Information Expert <a href="mailto:magyarzs@nebih.gov.hu">magyarzs@nebih.gov.hu</a>	<b>Károly Wisnovszky</b> Director +36 1 374 3201 <a href="mailto:wisnovszky.k@nebih.gov.hu">wisnovszky.k@nebih.gov.hu</a>	Classification of forests according to uses

Data themes (The numbering of data themes is based on Directive 2007/2/EC (INSPIRE))	Name of the institution managing spatial data	Name, position and contact details of the contact person (Mail address, telephone, mobile, e-mail)	Name and contact details of the head of institution (Mail address, telephone, mobile, e-mail)	Designation of the spatial data set managed by spatial data manager (to be completed when more than one management entity is assigned to a single data theme)
5. Human health and safety	National Institute of Environmental Health (OKI)	<b>Gizella Nádor</b> Spatial Information Group +36 1 4761355	<b>Dr Anna Páldi</b> Deputy Director-General in charge, Chief Physician Head of Department, Chief Physician Department of Aerobiological Monitoring +36 1 4761215	
6. Utility and governmental services	-			
7. Environmental monitoring facilities	MFGI	<b>László Vértessy</b> +36 1 363 7438 Head of Department <a href="mailto:vertesy.laszlo@mfgi.hu">vertesy.laszlo@mfgi.hu</a> <b>Ágnes Rotárné Szalkai</b> +36 1 2671424 <a href="mailto:szalkai@mafi.hu">szalkai@mafi.hu</a>	<b>Dr Tamás Fancsik</b> Director +36 1 2524680 +36 1 3637840 <a href="mailto:fancsik@elgi.hu">fancsik@elgi.hu</a>	Operation of the national water monitoring network
	MFGI	<b>László Vértessy</b> +36 1 363 7438 Head of Department <a href="mailto:vertesy.laszlo@mfgi.hu">vertesy.laszlo@mfgi.hu</a>	<b>Dr Tamás Fancsik</b> Director +36 1 2524680 +36 1 3637840 <a href="mailto:fancsik@elgi.hu">fancsik@elgi.hu</a>	Hydrogeology
	Forestry Directorate, NÉBIH	<b>Zsolt Magyar</b> +36 1 374 3235 Spatial Information Expert <a href="mailto:magyarzs@nebih.gov.hu">magyarzs@nebih.gov.hu</a>	<b>Károly Wisnovszky</b> Director +36 1 374 3201 <a href="mailto:wisnovszky.k@nebih.gov.hu">wisnovszky.k@nebih.gov.hu</a>	Data collected by the Measuring and Monitoring System for Forest Conservation

<b>Data themes</b> (The numbering of data themes is based on Directive 2007/2/EC (INSPIRE))	<b>Name of the institution managing spatial data</b>	<b>Name, position and contact details of the contact person</b> (Mail address, telephone, mobile, e-mail)	<b>Name and contact details of the head of institution</b> (Mail address, telephone, mobile, e-mail)	<b>Designation of the spatial data set managed by spatial data manager</b> (to be completed when more than one management entity is assigned to a single data theme)
	OVF	<b>József Tóth</b> Head of Department Central Department of Duties and Information Technology +361 2254400 +3630 3830510 <a href="mailto:toth.jozsef@ovf.hu">toth.jozsef@ovf.hu</a> <b>György Rátkai</b> Project Manager, Rapporteur +36 1 2254475 +36 30 4368841 fax:+36 1 2120773 <a href="mailto:ratkai.gyorgy@ovf.hu">ratkai.gyorgy@ovf.hu</a>	National Directorate-General for Water  <b>Béla Molnár</b> Director-General +36 1 2254411 fax: +36 1 2120773 <a href="mailto:ovf@ovf.hu">ovf@ovf.hu</a>	Monitoring of surface and subsurface waters
	Department of Nature Conservation, VM	<b>Dr Ildikó Varga</b> Ecology Department Head of Department +36 1 7952414 <a href="mailto:ildiko.varga@vm.gov.hu">ildiko.varga@vm.gov.hu</a>	<b>Dr Rozália Érdiné Szekeres</b> Head of Department-General Department-General of Nature Conservation +36 1 7952397 <a href="mailto:erdine.szekeres.rozalia@vm.gov.hu">erdine.szekeres.rozalia@vm.gov.hu</a>	National Biodiversity Monitoring System (NBmR)
	OVF	<b>József Tóth</b> Head of Department Central Department of Duties and Information Technology +361 2254400 +3630 3830510 <a href="mailto:toth.jozsef@ovf.hu">toth.jozsef@ovf.hu</a> <b>György Rátkai</b> Project Manager, Rapporteur +36 1 2254475 +36 30 4368841 fax:+36 1 2120773 <a href="mailto:ratkai.gyorgy@ovf.hu">ratkai.gyorgy@ovf.hu</a>	National Directorate-General for Water  <b>Béla Molnár</b> Director-General +36 1 2254411 fax: +36 1 2120773 <a href="mailto:ovf@ovf.hu">ovf@ovf.hu</a>	Flood risk zones
<b>8. Production and industrial facilities</b>	Database and Information Department, MBFH	<b>Dr Gábor Kovács</b> Head of Department +36 1 3731849 +36 20 7725980 <a href="mailto:gabor.kovacs@mbfh.hu">gabor.kovacs@mbfh.hu</a>	<b>Sándor Jászai</b> President, MPFH: Tel: +36 1 3012900 Fax: +36 1 3012903	Mining facilities

Data themes (The numbering of data themes is based on Directive 2007/2/EC (INSPIRE))	Name of the institution managing spatial data	Name, position and contact details of the contact person (Mail address, telephone, mobile, e-mail)	Name and contact details of the head of institution (Mail address, telephone, mobile, e-mail)	Designation of the spatial data set managed by spatial data manager (to be completed when more than one management entity is assigned to a single data theme)
	OVF	<p><b>József Tóth</b> Head of Department Central Department of Duties and Information Technology +361 2254400 +3630 3830510 <a href="mailto:toth.jozsef@ovf.hu">toth.jozsef@ovf.hu</a></p> <p><b>György Rátkai</b> Project Manager, Rapporteur +36 1 2254475 +36 30 4368841 fax:+36 1 2120773 <a href="mailto:ratkai.gyorgy@ovf.hu">ratkai.gyorgy@ovf.hu</a></p>	<p>National Directorate-General for Water</p> <p><b>Béla Molnár</b> Director-General +36 1 2254411 fax: +36 1 2120773 <a href="mailto:ovf@ovf.hu">ovf@ovf.hu</a></p>	Water intake
9. Agricultural and aquaculture facilities	-			
10. Population distribution, demography	KSH	<p><b>Zsófia Fábián</b> +36 1 3456395 <a href="mailto:zsofia.fabian@ksh.hu">zsofia.fabian@ksh.hu</a></p>	<p><b>Gábor Valkó</b> Head of Department-General Department-General of Rural Development, Agricultural and Environmental Statistics +36 1 3456554 <a href="mailto:gabor.valko@ksh.hu">gabor.valko@ksh.hu</a></p> <p><b>Pál Bóday</b> Head of Department <a href="mailto:pal.boday@ksh.hu">pal.boday@ksh.hu</a></p>	
11. Area management / restriction / regulation zones and reporting units	Database and Information Department, MBFH	<p><b>Dr Gábor Kovács</b> Head of Department +36 1 373 1849 +36 20 7725980, <a href="mailto:gabor.kovacs@mbfh.hu">gabor.kovacs@mbfh.hu</a></p>	<p><b>Sándor Jászai</b> President +36 1 3012900 Fax: +36 1 3012903</p>	Areas of raw material exploration and areas requiring mining permissions
	National Environmental Institute (NeKI)	<p><b>Ágnes Tahy</b> Deputy Head of Department-General +36 1 225 4400 <a href="mailto:agnes.tahy@neki.gov.hu">agnes.tahy@neki.gov.hu</a></p>	<p><b>Zoltán Hargitay</b> Appointed Director-General +36-1 2254400 <a href="mailto:zoltan.hargitay@neki.gov.hu">zoltan.hargitay@neki.gov.hu</a></p>	Areas of water resource protection
	National Environmental Institute (NeKI)	<p><b>Ágnes Tahy</b> Deputy Head of Department-General +36 1 225 4400 <a href="mailto:agnes.tahy@neki.gov.hu">agnes.tahy@neki.gov.hu</a></p>	<p><b>Zoltán Hargitay</b> Director-General in charge +36-1 2254400 <a href="mailto:zoltan.hargitay@neki.gov.hu">zoltan.hargitay@neki.gov.hu</a></p>	Partial water basin areas

Data themes (The numbering of data themes is based on Directive 2007/2/EC (INSPIRE))	Name of the institution managing spatial data	Name, position and contact details of the contact person (Mail address, telephone, mobile, e-mail)	Name and contact details of the head of institution (Mail address, telephone, mobile, e-mail)	Designation of the spatial data set managed by spatial data manager (to be completed when more than one management entity is assigned to a single data theme)
	"Lechner Lajos" Knowledge Centre VÁTI	<b>Géza Péter Juhász</b> Project Manager for Spatial Information and Data Management +36 1 279 2615 <a href="mailto:gjuhasz@vati.hu">gjuhasz@vati.hu</a>	<b>Zsolt Barkóczi</b> Director +36 1 279 2610 <a href="mailto:zsbarkoczi@vati.hu">zsbarkoczi@vati.hu</a>	Zones defined by the National Area Development Plan
	"Lechner Lajos" Knowledge Centre VÁTI	<b>Géza Péter Juhász</b> Project Manager for Spatial Information and Data Management +36 1 279 2615 <a href="mailto:gjuhasz@vati.hu">gjuhasz@vati.hu</a>	<b>Zsolt Barkóczi</b> Director +36 1 279 2610 <a href="mailto:zsbarkoczi@vati.hu">zsbarkoczi@vati.hu</a>	Zones defined by the area development plan of the special resort region of Lake Balaton
	"Lechner Lajos" Knowledge Centre VÁTI	<b>Géza Péter Juhász</b> Project Manager for Spatial Information and Data Management +36 1 279 2615 <a href="mailto:gjuhasz@vati.hu">gjuhasz@vati.hu</a>	<b>Zsolt Barkóczi</b> Director +36 1 279 2610 <a href="mailto:zsbarkoczi@vati.hu">zsbarkoczi@vati.hu</a>	Zones defined by the area development plan of the agglomeration of Budapest
	Department-General of National Parks and Landscape Conservation, VM	<b>Zoltán Árgay</b> Landscape and Nature Conservation Rapporteur	<b>Ákos Gábor Ugron</b> Head of Department-General +36 1 7952431 <a href="mailto:akos.gabor.ugron@vm.gov.hu">akos.gabor.ugron@vm.gov.hu</a>	Zonal categories of the territories of national parks
12. Natural risk zones	Database and Information Department, MBFH	<b>Dr Gábor Kovács</b> Head of Department +36 1 373 1849 +36 20 772 5980 <a href="mailto:gabor.kovacs@mbfh.hu">gabor.kovacs@mbfh.hu</a>	<b>Sándor Jászai</b> President Tel:+36 1 3012900 Fax:+36 1 3012903	Landslides and subsidences
	MFGI	<b>László Vértesy</b> +36 1 363 7438 Head of Department <a href="mailto:vertesy.laszlo@mfgi.hu">vertesy.laszlo@mfgi.hu</a>	<b>Dr Tamás Fancsik</b> Director +36 1 2524680 +36 1 3637840 <a href="mailto:fancsik@elqi.hu">fancsik@elqi.hu</a>	Geological data and maps
	Forestry Directorate, NÉBIH	<b>Zsolt Magyar</b> +36 1374 3235 Spatial Information Expert <a href="mailto:magyarzs@nebih.gov.hu">magyarzs@nebih.gov.hu</a>	<b>Károly Wisnovszky</b> Director +36 1 374 3201 <a href="mailto:wisnovszky.k@nebih.gov.hu">wisnovszky.k@nebih.gov.hu</a>	Data from the National Forest Fire Database

Data themes (The numbering of data themes is based on Directive 2007/2/EC (INSPIRE))	Name of the institution managing spatial data	Name, position and contact details of the contact person (Mail address, telephone, mobile, e-mail)	Name and contact details of the head of institution (Mail address, telephone, mobile, e-mail)	Designation of the spatial data set managed by spatial data manager (to be completed when more than one management entity is assigned to a single data theme)
	OVF	<b>József Tóth</b> Head of Department Central Department of Duties and Information Technology +361 2254400 +3630 3830510 <a href="mailto:toth.jozsef@ovf.hu">toth.jozsef@ovf.hu</a> <b>György Rátkai</b> Project Manager, Rapporteur +36 1 2254475 +36 30 4368841 fax:+36 1 2120773 <a href="mailto:ratkai.gyorgy@ovf.hu">ratkai.gyorgy@ovf.hu</a>	National Directorate-General for Water <b>Béla Molnár</b> Director-General +36 1 2254411 fax: +36 1 2120773 <a href="mailto:ovf@ovf.hu">ovf@ovf.hu</a>	Flood risk zones
13. Atmospheric conditions	OMSZ	<b>Dr Mária Putsay</b> +36 1 3464771 <a href="mailto:Putsay.m@met.hu">Putsay.m@met.hu</a> <b>Eszter Labó</b> +36 1 3464664 <a href="mailto:Labo.e@met.hu">Labo.e@met.hu</a>	<b>Dr Zoltán Dunkel</b> President +36 1 3464666 <a href="mailto:Dunkel.z@met.hu">Dunkel.z@met.hu</a>	The complete spatial data theme
14. Meteorological geographical features	OMSZ	<b>Dr Mária Putsay</b> +36 1 3464771 <a href="mailto:Putsay.m@met.hu">Putsay.m@met.hu</a> <b>Eszter Labó</b> +36 1 3464664 <a href="mailto:Labo.e@met.hu">Labo.e@met.hu</a>	<b>Dr Zoltán Dunkel</b> President +36 1 3464666 <a href="mailto:Dunkel.z@met.hu">Dunkel.z@met.hu</a>	The complete spatial data theme
15. Oceanographic geographical features	None			
16. Sea regions	None			
17. Bio-geographical regions	Research Institute of Ecology and Botany, Ecology Research Centre, Hungarian Academy of Sciences (MTA)	<b>Ferenc Horváth</b> +36 28 360 122/157 <a href="mailto:horvath.ferenc@okologia.mta.hu">horvath.ferenc@okologia.mta.hu</a>	<b>Zoltán Botta-Dukát</b> Director 2163. Vácrátót, Alkotmány u. 2-4. +36 28 360122 / 111 <a href="mailto:bdz@botanika.hu">bdz@botanika.hu</a>	Landscape classification according to vegetation
18. Habitats and biotopes	Forestry Directorate, NÉBIH	<b>Zsolt Magyar</b> +36 1 374 3235 Spatial Information Expert <a href="mailto:magyarzs@nebih.gov.hu">magyarzs@nebih.gov.hu</a>	<b>Károly Wisnovszky</b> Director +36 1 374 3201 <a href="mailto:wisnovszky.k@nebih.gov.hu">wisnovszky.k@nebih.gov.hu</a>	Quantitative and qualitative forest data

Data themes (The numbering of data themes is based on Directive 2007/2/EC (INSPIRE))	Name of the institution managing spatial data	Name, position and contact details of the contact person (Mail address, telephone, mobile, e-mail)	Name and contact details of the head of institution (Mail address, telephone, mobile, e-mail)	Designation of the spatial data set managed by spatial data manager (to be completed when more than one management entity is assigned to a single data theme)
	Department-General of Nature Conservation, VM	<b>Dr András Attila Takács</b> Senior Public Administration Consultant +36 30 6788757 <a href="mailto:attila.andras.takacs@vm.gov.hu">attila.andras.takacs@vm.gov.hu</a>	<b>Dr András Attila Takács</b> Senior Public Administration Consultant +36 30 6788757 <a href="mailto:attila.andras.takacs@vm.gov.hu">attila.andras.takacs@vm.gov.hu</a>	Nature Conservation Information System
19. Distribution of animal species and plant varieties	Forestry Directorate, NÉBIH	<b>Zsolt Magyar</b> Spatial Information Expert +36 1 374 3235 <a href="mailto:magyarzs@nebih.gov.hu">magyarzs@nebih.gov.hu</a>	<b>Károly Wisnovszky</b> Director +36 1 374 3201 <a href="mailto:wisnovszky.k@nebih.gov.hu">wisnovszky.k@nebih.gov.hu</a>	Tree species
	Department-General of Nature Conservation, VM	<b>Dr András Attila Takács</b> Senior Public Administration Consultant +36 30 6788757 <a href="mailto:attila.andras.takacs@vm.gov.hu">attila.andras.takacs@vm.gov.hu</a>	<b>Dr András Attila Takács</b> Senior Public Administration Consultant +36 30 6788757 <a href="mailto:attila.andras.takacs@vm.gov.hu">attila.andras.takacs@vm.gov.hu</a>	Nature Conservation Information System
20. Energy resources	Database and Information Department, MBFH	<b>Dr Gábor Kovács</b> Head of Department +36 1 3731849 +36 20 7725980 <a href="mailto:gabor.kovacs@mbfh.hu">gabor.kovacs@mbfh.hu</a>	<b>Sándor Jászai</b> President, MPFH: +36 1 3012900 Fax: +36 1 3012903	Hydrocarbons and geothermal energy
	Forestry Directorate, NÉBIH	<b>Zsolt Magyar</b> Spatial Information Expert +36 1 374 3235 <a href="mailto:magyarzs@nebih.gov.hu">magyarzs@nebih.gov.hu</a>	<b>Károly Wisnovszky</b> Director +36 1 374 3201 <a href="mailto:wisnovszky.k@nebih.gov.hu">wisnovszky.k@nebih.gov.hu</a>	Quantitative and qualitative forest data
	OVF	<b>József Tóth</b> Head of Department Central Department of Duties and Information Technology +36 1 2254400 +36 30 3830510 <a href="mailto:toth.jozsef@ovf.hu">toth.jozsef@ovf.hu</a> <b>György Rátkai</b> Project Manager, Rapporteur +36 1 2254475 +36 30 4368841 fax:+36 1 2120773 <a href="mailto:ratkai.gyorgy@ovf.hu">ratkai.gyorgy@ovf.hu</a>	National Directorate-General for Water <b>Béla Molnár</b> Director-General +36 1 2254411 fax: +36 1 2120773 <a href="mailto:ovf@ovf.hu">ovf@ovf.hu</a>	Locations of hydropower uses

<b>Data themes</b> (The numbering of data themes is based on Directive 2007/2/EC (INSPIRE))	<b>Name of the institution managing spatial data</b>	<b>Name, position and contact details of the contact person</b> (Mail address, telephone, mobile, e-mail)	<b>Name and contact details of the head of institution</b> (Mail address, telephone, mobile, e-mail)	<b>Designation of the spatial data set managed by spatial data manager</b> (to be completed when more than one management entity is assigned to a single data theme)
<b>21. Mineral resources</b>	Database and Information Department, MBFH	<b>Dr Gábor Kovács</b> Head of Department +36 1 373 1849 +36 20 7725980 <a href="mailto:gabor.kovacs@mbfh.hu">gabor.kovacs@mbfh.hu</a>	<b>Sándor Jászai</b> President +36 1 3012900 Fax: +36 1 3012903	The complete spatial data theme

## **12.2 List of references for the compilation of the report**

List of documents:

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List of websites:

Entity	Internet address
State Motorway Management Company (ÁAK)	<a href="http://www.autopalya.hu/">http://www.autopalya.hu/</a>
FÖMI	<a href="http://www.fomi.hu/portal/index.php/kezdoldal">http://www.fomi.hu/portal/index.php/kezdoldal</a>
Central Office of Public Administration and Electronic Public Services (KEK KH)	<a href="https://kozigazgatas.magyarorszag.hu/intezmenyek/450021/450023/450041">https://kozigazgatas.magyarorszag.hu/intezmenyek/450021/450023/450041</a>
KKK	<a href="http://kkk.gov.hu/pages/index.jsp">http://kkk.gov.hu/pages/index.jsp</a>
KSH	<a href="http://www.ksh.hu/">http://www.ksh.hu/</a>
Hungarian Public Roads Non-profit cPlc. (Magyar Közút Nonprofit Zrt.)	<a href="http://internet.kozut.hu/splash.html">http://internet.kozut.hu/splash.html</a>
MÁV PÜ	<a href="http://www.mav.hu/szolgaltatasok/palyakapacitas.php">http://www.mav.hu/szolgaltatasok/palyakapacitas.php</a>
MBFH	<a href="http://www.mbfh.hu/home/html/index.asp?msid=1&amp;sid=0&amp;HKL=1&amp;lng=1">http://www.mbfh.hu/home/html/index.asp?msid=1&amp;sid=0&amp;HKL=1&amp;lng=1</a>
MFGI	<a href="http://www.mfgi.hu/">http://www.mfgi.hu/</a>
Forestry Directorate, NÉBIH	<a href="http://www.nebih.gov.hu/szakteruletek/szakteruletek/erdeszeti_igazgatosag">http://www.nebih.gov.hu/szakteruletek/szakteruletek/erdeszeti_igazgatosag</a>
National Environmental Institute (NeKI)	<a href="http://neki.gov.hu/">http://neki.gov.hu/</a>
National Cadastral Programme Non-profit Ltd. (NKP NKft.)	<a href="http://www.nkp-kft.hu/">http://www.nkp-kft.hu/</a>
National Institute of Environmental Health (OKI)	<a href="http://oki.wesper.hu/">http://oki.wesper.hu/</a>
OMSZ	<a href="http://www.met.hu/">http://www.met.hu/</a>
OVF	<a href="http://www.ovf.hu/">http://www.ovf.hu/</a>
VÁTI	<a href="http://www.lltk.hu/">http://www.lltk.hu/</a>
Department-General of Nature Conservation, VM	<a href="http://www.termeszetvedelem.hu/tir">http://www.termeszetvedelem.hu/tir</a>

### 12.3 Costs of implementation of INSPIRE in years 2010

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